

SBARA's Groundplane

The monthly Newsletter of the South Bay Amateur Radio Association KU6S



Volume Number 14
November, 2013

SBARA 2014 Elections Occur during the November Membership Meeting Special

Positions for the 2014 Board of Directors (BOD) are now open for your nomination. A complete slate of officers are necessary for an effective leadership team. A number of members have shown interest in running for Elected Board so if you're asked by the nominating committee to run for office, be assured You will not be alone if you say yes.

SBARA Nominations and Elections

We are asking that members be willing to serving their amateur radio association by accepting nominations for these four elected positions. Term length is one year. Without new, energetic members serving one year in a leadership role the association cannot be effective in serving the needs of the Tri-Cities amateur radio community. Positions for the 2010 Board of Directors (BOD) are now open for your nomination. A complete slate of officers are necessary for an effective leadership team. A number of members have shown interest in running for the elected Board positions

The elected position Nominees for 2014 are:

President - Steve Wilson, KG6HJU
Vice President - Debra Patten, AG6HJ
Treasurer—Don Amyx, N6DA
Secretary - Ray Fellers, KJ6AMF

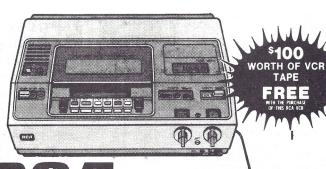
SBARA Groundplane Historical Products—Remember When?

DAVID SHAVER
K6DTX

SHAYER RADIO

SALES
SERVICE
INSTALLATION

3550 Lochinvar Avenue, Santa Clara, California 95051
(408) 247-4220



\$835

RCA
TAPE IT WHILE YOU'RE AWAY
RCA SELECT-A-VISION VCR
**5 VCR
TAPES FREE**
SAVE!

Now, RCA has the ultimate in VCRs. The RCA Select-A-Vision is one of the few decks that features 4-hours recording capability on one tape, plus a 20-foot pause remote switch. Hooks up in minutes to any TV set. Stop in for a demonstration today!

**FOR NEW OR USED
AMATEUR RADIO
GEAR** we specialize in

AMECO ICOM KENWOOD
ASTATIC KLM LARSEN
AUTEK RESEARCH MFJ
B & W NVE
CALLBOOK RESGENCY
CSE TEMPO
DENTRON TEN-TEC
DRAKE TURNER
HAM KEY & Many Others
HUSTLER
HY-GAIN

Business Hours 10 - 7 Mon. to Fri. 9 - 5 Sat.
Free Coffee — No Hassels

El Camino
3550
Lochinvar Ave.
Homestead Center
Homestead Rd
Lawrence Expressway
NEW LOCATION
SANTA CLARA
Hwy 280
West
East
N
S

New Phone (408) 247-4220

DAVID SHAVER
K6DTX

SHAYER RADIO

SALES
SERVICE
INSTALLATION

3550 Lochinvar Avenue, Santa Clara, California 95051
(408) 247-4220

**NEW!
THE FUTURE NOW!
FM2015R**



KDK

Does Your Unit Cover The New
Sub-band 144.5 - 145.5 MHz?
The FM2015R Does. PLUS MARS-CAP!

All Solid State-CMOS PL digital synthesized - No Crystals to Buy! 5KHz steps - 144-149 MHz-LED digital readout PLUS MARS-CAP and MULTIPLE OFFSET.

- 5 MHz Band Coverage - 1000 Channels (instead of the usual 2MHz to 4MHz-400 to 800 Channels)
- 4 CHANNEL RAM IC MEMORY WITH SCANNING
- MULTIPLE FREQUENCY OFFSETS
- ELECTRONIC AUTO TUNING - TRANSMIT AND RECEIVE
- INTERNAL MULTIPURPOSE TONE OSCILLATOR • RIT
- DIRECT FREQUENCY SELECTOR
- 15Watts Output - Unequalled Receiver Sensitivity and Selectivity
- BAND PASS FILTER, MONOLITHIC CRYSTAL FILTER AND AUTOMATIC TUNED RECEIVER FRONT END, COMPARE! • Superb Engineering and Superior Commercial Avionics Grade Quality and Construction Second to None at ANY PRICE.

INTRODUCTORY
PRICE

\$41900

Regulated AC/PS
Model FMPS-4R ... \$39.95

\$41900

FREQUENCY RANGE: Receive and Transmit 144.0-145.995 MHz. 5KHz steps (1000 channels INCLUDING NEW BAND 144.5-145.5 MHz) CAP and MULTIPLE OFFSET*

LED DIGITAL READOUT WITH H.C. MEMORY, program av. frequency, receive and transmit, scan, monitor, tone oscillator, control-search for occupied (closed channel or vacant) open channel, receive and transmit, receive and transmit, monitor matrix to wire or charge.

MULTI-PURPOSE TONE OSCILLATOR: Three position A.R.C. provided for installation of optional crystals. EXAMPLE: 1 MHz offset from 144.0 to 145.0 or 144.5 to 145.5. 100-5000 KHz steps, plus single, any frequency.

INTERNAL TONE OSCILLATOR: 100-5000 KHz steps, plus 1750Hz tone burst for "whistle on operation" and sub-audible tone generation. Frequency range 144.0-145.995 MHz. 5KHz steps provided. Internal 2 position switch for automatic and manual control. Frequency range 144.0-145.995 MHz. 5KHz steps (1000 channels).

ANALOG FREQUENCY SELECTOR: Three position, internally mounted slide select 100KHz and 10KHz steps. Frequency changing without need to view LED's while driving and programming the unit. The amount of width of B.W.D. is determined by the number of steps selected.

FULL AUTOMATIC TONE OSCILLATOR: RECEIVES FREQUENCY AND TRANSMITTER CIRCUITS DC output of PLL fed to varactor diodes in all front end and mixer circuits provides full sensitivity and complete coverage of the band. 144.0-145.995 MHz. 5KHz steps. 1000 CHANNELS. DC output constant load aside to band edge. NO OTHER AMPLIFIED FREQUENCY SOURCE IS NEEDED.

ACCESSORY SOCKET: Fully wired for tone tone, phone patch, antenna patch, etc. Provides audio outputs receiver output to internal speaker when connected to an external speaker or headphones. Discriminator Meter. -3 Reading on receive and Power Out on transmitter.

RECEIVE: Better than 25dB sensitivity, 16 POLE FILTER as well as monolithic crystal filter and TUNED RF circuits provide excellent selectivity. COMPARE!

POWER: 15Watts Output, 15Watts Input, 1 Watt Receive and 1 Watt Transmitter. Low power may be adjusted anywhere between 1 and 15 watts. Fully switchable or open SWING. Power Out is controlled by a switch on the front panel. Power input is 110VAC, 60Hz. etc. included. Weight: 5 lbs.

Manufactured by one of the world's most distinguished Avionics manufacturers, Kyokuto Denshi Kaisha, Ltd.
First in the world with an all solid state 2 meter FM transceiver.

A Giant Misalignment in a Multiple Planet

Scientists have discovered a cause for a planetary system whose star tilts some 45° from the plane of the orbit of its planets.

By NASA Headquarters, Washington, D.C. |

Published: Monday, October 21, 2013

Graphical sketch of the Kepler-56 system. The line of sight from Earth is illustrated by the dashed line, and dotted lines show the orbits of three detected companions in the system. The solid arrow marks the rotation axis of the host star, and the thin solid line marks the host star equator.

NASA GSFC/Ames/D Huber Using data from the NASA's Kepler space telescope, an international research team led by Daniel Huber from NASA's Ames Research Center in Moffett Field, California, studied Kepler-56, a red giant star four times larger than the Sun located at a distance of approximately 3,000 light-years from Earth. By analyzing the fluctuations in brightness at different points on the surface of Kepler-56, Huber and his collaborators discovered that the star's rotation axis is tilted by about 45° to our line of sight. "This was a surprise because we already knew about the existence of two planets transiting in front of Kepler-56. This suggested that the host star must be misaligned with the orbits of both planets," said Huber. "What we found is quite literally a giant misalignment in an exoplanet system."

From the Editor

Welcome to another edition of the Groundplane.

Outdoor time is winding down for us, so we turn our attention to indoor amateur radio projects. What projects are you planning? Cleaning up your shack? Building a new electronic device? Exploring a new mode?

Keep the Groundplane in mind as you do your winter projects and write a quick article about what you are doing. A picture or two can also help tell the story. If you took the time to do the project, others will enjoy reading about it. Don't think you must be an expert, just write about what you did, how you did it and how it turned out. If you need help writing a finished article, let me know. And remember, failures are instructional, too, so if you had problems, tell us about those as well. Your article might just be the inspiration someone else needs to do their project (and article!).

William
Editor, Groundplane

Exam sessions are conducted by SBARA VE volunteers working under the direction of the FCC. There is a charge for taking the exam. The exam fee is set by the Volunteer Exam Coordinator. SBARA's Fee is \$15.00

SBARA VE Testing Schedule

Exams will be administered at Hurricane Electric, 48233 Warm Springs Blvd., Fremont. Contact: Greg Miller, wy6p at arrl dot net for info. \$15 fee, bring a photo ID. Walk-ins allowed.



Tri-City VE Session Dates 2013

Sat Sep 14, 2013, 9:00 am – 11:30 am

Tue Oct 8, 2013, 6:30 pm – 9:00 pm

Sat Nov 9, 2013, 9:00 am – 11:30 am

Tue Dec 10, 2013, 6:30 pm – 9:00pm

South Bay Amateur Radio Club conducts FCC authorized tests for Technician, General, and Extra class licenses every month on the 2nd Saturday at Hurricane Electric 48233 Warm Springs Boulevard Fremont, CA. 9453. Hurricane Electric Doors open at 8:45 AM. We begin testing about 9:00 AM. Enter through the main building entrance and then go up the stairs to the second floor or use the elevator. Then go to the right and look for the Amateur Radio testing exam signs. We do ask that you park your car in the main parking lot not directly in front of the Main doors to Hurricane Electric.

Our next test session will be held Saturday September 14, 2013 (9:00 AM to 11:00 AM).

Very important: Please remember to bring the following items with you to any exam session: The appropriate fee - cash only (currently \$15) for the test. Please bring your picture ID, the original and a copy of your Amateur Radio license (if licensed), and calculator if you would like to use one (all memories must be cleared). It is very important to have your Social Security Number, or if you have been issued an FRN (Federal Registration Number) from the FCC, please use that in place of your SSN because without either your SSN or FRN, the FCC will not process your application. If you are upgrading please bring all CSCE's and a copy showing proof of recent passed exam if not already processed by the FCC.

If you have any Questions regarding our test session or Questions about upgrading, please contact me - via email at:
wy6p at arrl dot net

Again - The test fee is still \$15.00 (cash only -- no credit cards or checks).
73's AL – Greg WY6P

SBARA Weekly Nets—Voice and CW Action!!

The SBARA Net Meets....

Every Monday night at 7:30 pm on the WA6PWW (currently N6IMS) repeater, 147.015 MHz, positive offset, PL (if enabled) 103.5 Hz.

projects you're working on and so on. It's a chat net.

We need net control operators. If you'd like to be net control, let us know during the next net.

Bernhard AE6YN

Topics are club related things, —... ...--

The Slow CW Net Meets....

Every Thursday and Sunday night at 7:30 pm, Thursday on 144.230 MHz Sunday on 7.057MHz +/- 3 kHz

not just an FM) radio in order to follow.

groups.com>

—... ...--

The net has now its own e-mail address. Please contact us here:

Bernhard AE6YN

You need an "allmode" (i.e.

"SF Bay CW Enthusiasts" <sf-bay-cw-enthusiasts at google-

Repeater Information

WA6PWW— 147.015 + 600Khz, PL 103.5

500Khz, PL 107.2

123.0

WA6PWW—223.900—

WA6PWW—442.600 +5Mhz, PL107.2

K6AIR—441.525 +5Mhz, PL 123.0

K6AIR—146.940—600Khz, PL

Helpful Amateur Radio Web Page Links

www.sbara.org

www.arrl.org

www.qrz.com

www.eham.net

www.twit.tv/hn

Upcoming SBARA Events

SBARA - Groundplane

The Groundplane is published monthly by the South Bay Amateur Radio Association. Articles and letters are always welcome. The normal deadline for material is the 20th day of each month for the next month's news-letter. Articles can be sent by email to hamradio at Comcast dot net or via U.S. Mail. Contact the Editor for details and submission guidelines.



**November 8th, 2013 at 7:30pm
Hurricane Electric, Fremont**

Amateur License Exams

ARRL VEC- September 14th @ 9:30 am
at Hurricane Electric – 48233 Warm Springs Blvd. Fremont.

Contact: Greg Miller, wy6p at arrl dot net for info. \$15 fee.

South Bay Amateur Radio Association — SBARA
The Ground Plane — KU6S
<http://www.sbara.org>
P.O. Box 8401
Fremont, Ca.

PLEASE
PLACE
STAMP
HERE